

WYOMING AIR GUARD FIREFIGHTERS RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT FOR THE YEAR BEGINNING JANUARY 1, 2013



May 3, 2013

Board of Trustees

Wyoming Air Guard Firefighters Retirement System
6101 Yellowstone Road
Suite 500
Cheyenne, WY 82002

Dear Board of Trustees:

Subject: Actuarial Valuation as of January 1, 2013

We are pleased to present the report of the actuarial valuation of the Wyoming Air Guard Firefighters Retirement System ("the Fund") for the plan year commencing January 1, 2013. This report describes the current actuarial condition of the Fund, determines the calculated employer contribution rate (the actuarially required rate), and analyzes changes in this contribution rate from the prior year. Valuations are prepared annually, as of January 1, the first day of the Fund's plan year.

Financing objectives and funding policy

The purpose of this actuarial valuation is to determine whether or not the contributions are sufficient to meet the obligations of the Fund. A portion of the funding comes from Federal funding of 9.65% of payroll; to the extent that this funding ceases, the cost of the plan may change.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded ratio as of January 1, 2013 is 91.70% compared to 85.62% as of January 1, 2012. This funded ratio is based on the assumption that no future cost-of-living increases will be paid. On a market value of assets basis, the funded ratio is 89.25% as of January 1, 2013 and 77.73% as of January 1, 2012.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2013. Legislation was enacted that prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100%. There were no changes to benefit provision since the prior valuation.

The benefit provisions are summarized in Appendix B of the report.

Assumptions and methods

Actuarial assumptions and methods are set by the Board, based upon recommendations made by the plan's actuary. The current assumptions used in the valuation were adopted by the Board, in conjunction with the State Plan, based on the recommendations from an experience study performed by the prior actuary as of December 31, 2007. Effective February 22, 2013, the Board adopted new assumptions which will be used in the January 2014 valuation.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations presented in the report are intended to provide information for rational decision making.

The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 25.

All assumptions and methods are described in Appendix A of the report.

Data

Member data for all members was supplied as of January 1, 2013 by the Fund's staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data.

Asset and financial information as of January 1, 2013 was supplied to us by McGee, Hearne & Paiz, LLP.

Plan experience

As part of each valuation, we examine the Fund's experience relative to the assumptions. As experience in a given year deviates from the assumptions, a gain occurs if the liabilities grow slower than the assumption set anticipates and a loss occurs if the liabilities grow faster. This past fiscal year the Fund had a total experience gain of \$242,529, primarily due to a \$250,204 gain on contributions. This experience gain was offset, in part, by the loss on the investments of \$59,281. The aggregate results of these analyses are disclosed in Tables 4 & 5 under Section III of the report.

Actuarial certification

All of the tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company. We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Fund as of January 1, 2013.

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries and consultants. Mark Randall and Leslie Thompson are Enrolled Actuaries and all of the undersigned are Members of the American Academy of Actuaries, and all meet the Qualification Standards of the American Academy of Actuaries. Finally, all of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Mark R. Randall

Mark R. Randall, FCA, EA, MAAA

Executive Vice President

Leslie Thompson, FSA, FCA, EA, MAAA

Les wid Thompson

Senior Consultant

Todd D. Kanaster, ASA, MAAA

Actuary

			Page
Section	I — E	Executive Summary	
Exec	cutive	Summary	1
Section	II —	Discussion	
Con	tributi	on Requirements	2
Calc	culatio	n of Contribution Rates	3
		Data and Experience	
		Pata	
		ovisions	
		Methods and Assumptions	
GAS	SB and	l Funding Progress	8
Section	III —	- Supporting Exhibits	
Tabl	le 1	- Calculation of Annual Required Contribution Rate	9
Tabl	le 2	- Cost Breakdown	10
Tabl	le 3	- History of Total Normal Cost	11
Tabl	le 4	- Calculation of Total Actuarial Gain/(Loss)	12
Tabl	le 5	- Change in Calculated Contribution Rate Since the Prior Valuation	13
Tabl	le 6	- Statement of Plan Net Assets	14
Tabl	le 7	- Reconciliation of Plan Net Assets	15
Tabl	le 8	- Progress of Fund Through December 31, 2012	16
Tabl	le 9	- Development of Actuarial Value of Assets	17
Tabl	le 10	- History of Investment Returns	18
Tabl	le 11	- Solvency Test	19
Tabl	le 12	- Schedule of Funding Progress	20
Tabl	le 13	- Schedule of Contributions from the Employer(s) and Other Contributing En	tities21
Tabl	le 14	- Reconciliation of Participant Data	22
Tabl	le 15	- Demographic Statistics	23
Tabl	le 16	- Distribution of Male Active Members by Age and by Years of Service	24
Tabl	le 17	- Distribution of Female Active Members by Age and by Years of Service	
Tabl	le 18	- Distribution of Total Active Members by Age and by Years of Service	26

Table 19	- Schedule of Pension Recipients Added to and Removed from Rolls	27
Table 20	- Pensioners by Age	28
Table 21	- Pensioners by Option Code	29
Table 22	- Retirees and Disabled Members by Service at Retirement and Years Since Retirement	30
Table 23	- Retirees and Disableds by Year of Retirement	31
Appendix A	— Summary of Actuarial Assumptions and Methods	32
Appendix B	— Summary of Plan Provisions	36



EXECUTIVE SUMMARY

Executive Summary

1. Contributions: a. Total normal cost b. Employee contributions c. Net employer normal cost d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%			January 1, 2013	January 1, 2012
a. Total normal cost b. Employee contributions c. Net employer normal cost d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions c. Employer c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 11.6% (2.63%) (1.6.65%) (2.63%) (1.6.65%) (2.63%) (1.28%) (2.63%) (1.28%) (2.63%) (1.28%) (2.63%) (1.28%) (2.28%) (1.28%) (2.28%) (1.28%) (2.28%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (2.63%) (1.28%) (2.63		Item	No COLA	No COLA
a. Total normal cost b. Employee contributions c. Net employer normal cost d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions c. Employer c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 11.6% (2.63%) (1.6.65%) (2.63%) (1.6.65%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (1.28%) (2.63%) (2.63%) (2.63%) (1.28%) (2.63				
b. Employee contributions c. Net employer normal cost d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions c. Employer c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%				
c. Net employer normal cost d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 80.19% 1.16% 0.19% 1.16% 0.449,572 (8.40%) 84,330,426 84,4330,426 84,449,572 84,852,245 84,852,245 84,02,673 8402,673	a.	Total normal cost	14.02%	13.75%
d. Amortization payment e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 80.19% (1.28%) (7.12%) (8.40%) 84,330,426 84,4330,426 84,449,572 \$4,852,245 \$4,852,245 \$402,673 8402,673	b.	Employee contributions	(16.65%)	(16.65%)
e. Administrative expenses f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 80.19% (1.28%) (2.49%)	c.	Net employer normal cost	(2.63%)	(2.90%)
f. Required contribution g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) (7.12%) (8.40%) (4.24%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%)	d.	Amortization payment	1.16%	2.22%
g. Statutory contribution h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%) (8.40%)	e.	Administrative expenses	0.19%	0.20%
h. Shortfall/(surplus) 2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) (8.40%) \$4,40%) \$4,330,426 \$4,449,572 \$4,852,245 \$402,673 \$402,673	f.	Required contribution	(1.28%)	(0.48%)
2. Funding Elements: a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 84,330,426 \$4,449,572 \$4,4852,245 \$402,673 \$1. \$402,673 \$2. \$402,673	g.	Statutory contribution	(7.12%)	(7.12%)
a. Market value of assets (MVA) b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) \$4,330,426 \$4,449,572 \$4,852,245 \$402,673	h.	Shortfall/(surplus)	(8.40%)	(7.60%)
b. Actuarial value of assets (AVA) c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 84,449,572 \$4,449,572 \$4,852,245 \$402,673 \$N/A \$N/A \$N/A \$N/A \$N/A \$N/A \$1. Employer \$N/A \$1. Other \$1. Other \$1. Other \$23,938 \$1. Other	2. Fun	ding Elements:		
c. Actuarial accrued liability (AAL) d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 91.70% 84,852,245 \$402,673 \$4,852,245 \$402,673	a.	Market value of assets (MVA)	\$4,330,426	\$3,405,103
d. Unfunded/(overfunded) actuarial accrued liability (UAAL) 3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%	b.	Actuarial value of assets (AVA)	\$4,449,572	\$3,750,702
3. GASB 25/27 Elements: a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%	c.	Actuarial accrued liability (AAL)	\$4,852,245	\$4,380,850
a. Annual required contribution b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) (\$23,938) N/A N/A N/A 91.70% 89.25%	d.	Unfunded/(overfunded) actuarial accrued liability (UAAL)	\$402,673	\$630,148
b. Actual contributions i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) N/A 91.70% 89.25%	B. GAS	SB 25/27 Elements:		
 i. Employer ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25% 	a.	Annual required contribution	(\$23,938)	(\$7,270)
ii. Other c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%	b.	Actual contributions	N/A	230,795
c. Percentage contributed d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 89.25%		i. Employer	N/A	109,253
d. Funded ratio on an actuarial basis (AVA/AAL) e. Funded ratio on an market basis (MVA/AAL) 91.70% 89.25%		ii. Other	N/A	121,542
e. Funded ratio on an market basis (MVA/AAL) 89.25%	c.	Percentage contributed	N/A	100.00%
i ' '	d.	Funded ratio on an actuarial basis (AVA/AAL)	91.70%	85.62%
f. Projected valuation payroll \$1.866.393	e.	Funded ratio on an market basis (MVA/AAL)	89.25%	77.73%
	f.	Projected valuation payroll	\$1,866,393	\$1,522,749



DISCUSSION

Contribution Requirements

- Exhibits throughout this report are based primarily, unless stated otherwise, on the assumption of no future cost-of-living adjustments (COLAs).
- As stated in Senate Enrolled Act No. 66, recommendations for benefit changes can only occur if
 the funded ratio stays at least 100%. The actuarial value funded ratio is 91.70% and the market
 value funded ratio is 89.25%.
- As shown in the Executive Summary, the most significant factor in the decrease in the "bottom line" contribution requirements this year was due to contributions in excess of what was required.
- There were no changes in the benefit provisions since the prior valuation.
- The amortization payment is based upon the following assumptions:
 - 30-year open funding period
 - Amortization payment amounts are calculated in such a way that they will increase as a level percentage of payroll
 - Aggregate payroll growth is assumed at 4.50% per year, and
 - Future growth in the number of active members is not reflected in the annual valuation
- The funded ratio increased from the prior year due to contributions in excess of the ARC. The actuarial value of assets returned less than the assumption (6.51% return versus the assumed rate of return of 8.00% per annum), with only 20% of this loss recognized this year and the remaining loss recognized over the next four years.
- The calculated funding period assuming the current statutory contribution of 7.12% of pay is 2.4 years."

Calculation of Contribution Rates

The funds available to pay benefits come from two sources, contributions and investment income on those contributions (the majority of the funds available to pay benefits typically come from investment income). The Fund receives contributions from two sources, employer contributions and member contributions, which are both determined as a percentage of pay. As shown in Table 1 under Section III of the report, the employer contribution rate has two components:

- The normal cost percentage (NC%)
- The amortization percentage (UAAL%)
- The administrative expenses

The NC% is the theoretical amount which would be required to pay the members' benefits if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. The NC% is shown in Table 3 under Section III of the report.

Members are required to make employee contributions and only the excess of the NC% over the member contribution rate is included in the employer contribution rate.

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current participants of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus, the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including actuarial gains and losses which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The UAAL% is the amount required to fund this difference. It is the amount, expressed as a level percentage of payroll, necessary to amortize the UAAL. This amortization is over a period of 30 years beginning January 1, 2013. The Executive Summary shows the UAAL%, called Amortization Payment, compared to that of last year.

Administrative expenses are the average of the actual expenses for the prior two years, with each year projected at 6.50% to the valuation date.

The calculated rate is used in determining the contributions necessary to meet the GASB Annual Required Contribution (ARC) for the twelve-month period beginning January 1, 2013. Note, however, that the employer contribution is set at 7.12% of payroll. Therefore, the ARC will be fully contributed. This is detailed in the Executive Summary.

Financial Data and Experience

As of January 1, 2013, the Fund has a total market value of \$4.3 million. Financial information was received from McGee, Hearne & Paiz, LLP.

Table 7 under Section III of the report shows a reconciliation of the market values between the beginning and end of 2012.

During 2012, the total investment return on the market value of assets (MVA), as reported by NEPC, LLC, was 14.06%, as shown in Table 10 under Section III of the report.

In determining the contribution amounts and funded status of the Fund, an actuarial value of assets (AVA) is used rather than the market value of assets. The method used to compute the AVA is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income (based on the annual assumed 8.00% investment return rate), with interest, dividends, and other income recognized immediately each year, and recognizes the difference over five years, at 20% per year. This "smoothing method" is intended to help reduce the volatility of the contribution amounts from year to year.

The development of the AVA is shown in Table 9 under Section III of the report. The AVA is \$4.4 million. The AVA is 102.75% of the MVA as of December 31, 2012, compared to 110.15% last year. The difference between the AVA and the MVA is deferred gains and losses. As of January 1, 2013, the total deferred loss was \$119,146 and as of January 1, 2012, the total deferred loss was \$345,599.

In addition to the market return, Table 10 also shows the return on the actuarial value of assets for the Fund. For 2012, this return was 6.51%. Since this return is less than the assumed 8.00% investment return, an actuarial loss occurred increasing the unfunded actuarial accrued liabilities of the Fund by \$59,281 as shown in Table 4.

Member Data

Member data as of January 1, 2013 was supplied electronically by the Fund's staff. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall.

Table 15 under Section III of the report shows the number of members by category (active, inactive, retired, etc.) along with member statistics. Tables 16 through 23 show summaries of certain historical data and include membership statistics.

Of the 31 active participants, 2 are eligible or will become eligible for normal retirement and 7 are eligible or will become eligible for early retirement in 2013.

Total active member payroll increased 22.57% last year.

This change in payroll is significant because the methodology used in the valuation to amortize the unfunded actuarial accrued liability assumes a growing payroll into the future. If the payroll does not grow at the assumed 4.50% per year average, then the current amortization payments may be understated and the funding position of the Fund will not strengthen as assumed over time. Higher than expected payroll growth, however, has the opposite effect and the funded position of the Fund should trend to 100%. Table 5 under Section III of the report shows, for the past year, payroll for the plan increased more than expected, so the effect is a decrease in the calculated contribution rate of 0.23% of payroll.

The reason payroll increased more than expected is due to new entrants to the Plan. This represented a gain to the Plan, as shown in Table 4 under Section III of the report.

Benefit Provisions

Appendix B of the report includes a more detailed summary of the benefit provisions for the Fund. A brief summary is as follows:

- Normal Retirement Eligibility
 - Age 60 with four or more years of service, or age 50 with 25 or more years of service.
- Normal Retirement Benefit
 - 2.50% of employee's Final Average Salary for each year of credited service. This amount is reduced by 5.0% per year that the employee is under age 60. However, members who are at least age 55 retiring with a combined age and service of at least 75 receive an unreduced benefit.
- Normal Form of Payment
 - Monthly benefit for life with a lump-sum death benefit equal to the excess (if any) of the employee contributions with interest over the total benefits received.
- Employee Contributions are required
 - 16.65% of pay.
- Post-retirement cost-of-living adjustments (COLAs) may be granted only if the funded ratio is shown to stay at least 100%.

There were no changes in the benefit provisions since the prior valuation.

Actuarial Methods and Assumptions

Appendix A of the report includes a summary of the actuarial assumptions and methods used in this valuation. A few highlights are listed as follows:

- Costs are determined using the Entry Age Normal actuarial cost method, calculated as a level percentage of payroll.
- The unfunded actuarial accrued liability is amortized over an open 30 year period as a level percent of payroll.
- The assumed annual investment return rate is 8.00%, with assumed inflation of 3.50%.
- Payroll is assumed to increase at 4.50% per year.
- Inactive vested participants are assumed to retire at age 60 or on the valuation date if over age 60.
- No benefit data is available for members entitled to deferred benefits. The present value of benefits expected to be paid to vested inactive non-retired members is approximated using the data provided.

Based on the current mortality tables, the average future lifetime for current pensioners is 19.0 years.

There have been no changes in actuarial assumptions or methods since the prior valuation.

GASB and Funding Progress

Governmental Accounting Standards Board Statement Number 25 (GASB 25) contains certain accounting requirements for the Fund. In particular, it requires the inclusion of two special schedules in the Fund's annual report:

- 1. Schedule of Funding Progress
- 2. Schedule of Employer Contributions

Information needed to prepare the Schedule of Funding Progress is included in Table 12 under Section III of the report.

Governmental Accounting Standards Board Statement Number 27 (GASB 27) also requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed.

Under GASB 27, the ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the unfunded actuarial accrued liability (UAAL). This amortization payment must be computed using a funding period no greater than 30 years. Further, the amortization payment included in the ARC may be computed as a level dollar amount, or it may be computed as an amount which increases with payroll (level percentage of payroll). However, if payments are computed on a level percentage of payroll approach, the payroll growth assumption may not anticipate future membership growth.

Since the recommended employer contribution rate of -1.28% is computed as a level percentage of payroll using an amortization period of 30 years from the valuation date, the calculated rate meets the definition of an acceptable ARC.



SUPPORTING EXHIBITS

Calculation of Annual Required Contribution Rate

(Assumes No Future Cost-Of-Living Increases)

	Τ.		- 1 - 2012
-	Item	January 1, 2013	January 1, 2012
1.	Projected valuation payroll	\$1,866,393	\$1,522,749
2.	Present value of future pay	\$15,790,153	\$13,703,508
3.	Employer normal cost rate	(2.63%)	(2.90%)
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits for active members	\$6,465,186	\$5,655,643
	b. Less: present value of future employer normal costs	462,290	436,181
	c. Less: present value of future employee contributions	(2,629,060)	(2,281,634)
	d. Actuarial accrued liability	\$4,298,416	\$3,810,190
5.	Total actuarial accrued liability for:		
	a. Retirees and beneficiaries	\$370,169	\$377,539
	b. Disabled members	-	- -
	c. Inactive members	183,660	193,121
	d. Active members (Item 4d)	4,298,416	3,810,190
	e. Total	\$4,852,245	\$4,380,850
6.	Actuarial value of assets (Table 9)	\$4,449,572	\$3,750,702
7.	Unfunded actuarial accrued liability (UAAL)		
	(Item 5e - Item 6)	\$402,673	\$630,148
8.	Funding period	30 years	30 years
9.	Assumed payroll growth rate	4.50%	4.50%
10.	Employer contribution requirement		
	a. UAAL amortization payment as % of pay	1.16%	2.22%
	b. Employer normal cost	-2.63%	-2.90%
	c. Administrative Expense	0.19%	0.20%
	d. Contribution requirement $(a + b + c)$	-1.28%	-0.48%

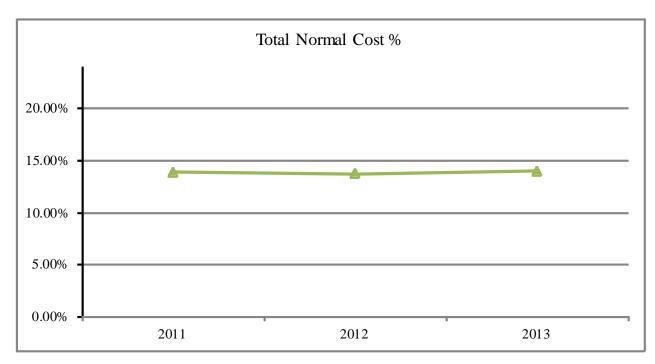
Cost Breakdown
(Assumes No Future Cost-Of-Living Increases)

	Present Value of Future Normal Costs	Actuarial Accrued Liabilities	Total Present Value of Benefits
Item	(1)	(2)	(3) = (1) + (2)
Age and service allowances based on total service and disability benefits likely to be rendered by present active members	\$1,337,967	\$4,164,698	\$5,502,665
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	103,296	203,262	306,558
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	725,507	(69,544)	655,963
Benefits likely to be paid to vested inactive members	0	183,660	183,660
Benefits to be paid to members due refunds	0	0	0
Benefits to be paid to current retirees, disabled members, beneficiaries, and future beneficiaries of current retirees	0	370,169	370,169
Total	\$2,166,770	\$4,852,245	\$7,019,015
Actuarial value of assets	0	4,449,572	4,449,572
Liabilities to be covered by future contributions	\$2,166,770	\$402,673	\$2,569,443



History of Total Normal Cost

Fiscal Year Ending December 31	Normal Cost as Percent of Payroll
(1)	(2)
2011	13.90%
2012	13.75%
2013	14.02%



Calculation of Total Actuarial Gain/(Loss)

(Assumes No Future Cost-Of-Living Increases)

Item	January 1, 2013
1. Derivation of Experience Gain/(Loss)	
a. Unfunded actuarial accrued liability (UAAL) - previous valuation	\$630,148
b. Normal cost (NC) for fiscal year ending 12/31/2012	209,371
c. Actual administrative expenses for fiscal year ending 12/31/2012	2,899
d. Actuarially determined contribution for fiscal year ending 12/31/2012	246,268
e. Interest accrual:	
(i) For whole year on (a)	50,412
(ii) For half year on (b) $+$ (c) $-$ (d)	(1,360)
(iii) Total interest: $(e)(i) + (e)(ii)$	49,052
f. Change in UAAL due to plan changes	-
g. Change in UAAL due to assumption change	-
h. Expected UAAL current year: $(a) + (b) + (c) - (d) + (e)(iii) + (f) + (g)$	645,202
i. Actual UAAL current year	402,673
j. Experience gain/(loss): (h) - (i)	\$242,529
k. Experience gain/(loss) as a % of actuarial accrued liability	5.00%
2. Approximate portion of gain/(loss) due to investments	
(at actuarial value)	(\$59,281)
3. Approximate portion of gain/(loss) due to contributions	
higher or lower than expected	\$250,204
nigher or lower than expected	\$230,204
4. Approximate amount of gain/(loss) due to liabilities: (1)(j) - (2) - (3)	\$51,606
a. Age & service retirements	3,931
b. Disability retirements	(216)
c. Death-In-service retirements	2,813
d. Withdrawal from employment	(32,798)
e. Rehires	-
f. Pay increases	197,497
g. Death after retirement	(4,193)
h. Other*	(115,428)
i. Other as a % of actuarial accrued liability	-2.38%

^{*} Other gainloss includes losses due to confirmed service increases more than expected for some participants.

Change in Calculated Contribution Rate Since the Prior Valuation

(Assumes No Future Cost-Of-Living Increases)

Item	January 1, 2013
1. Calculated contribution rate as of January 1, 2012	-0.48%
2. Change in contribution rate during year	
a. Change in total normal cost	0.27%
b. Assumption changes	0.00%
c. Recognition of prior asset losses (gains)	0.26%
d. Actuarial (gain) loss from current year asset performance	-0.13%
e. Actuarial (gain) loss from liability sources and administrative expenses	-0.09%
f. Difference between contributions made and required contributions	-0.86%
g. Effect of payroll growing (faster)/slower than assumption	-0.23%
h. Open amortization period reset to 30 years	-0.02%
i. Other changes	0.00%
j. Total change	-0.80%
3. Calculated contribution rate as of January 1, 2013	-1.28%

Statement of Plan Net Assets

Assets at Market Valu	e		
Item	FYE 2012	FYE 2011	
1. Cash and Cash Equivalents (Operating Cash)	\$195,337	\$197,762	
2. Receivables			
a. Insurance premium tax	\$0	\$	
b. Buy backs	0		
c. Employee contributions	27,239	31,53	
d. Employer contributions	11,648		
e. Securities sold	10,670	23,80	
f. Accrued interest and dividends	13,224	9,18	
g. Currency contract receivable	102,897	167,21	
h. Other	0		
i. Rebate and fee income receivable	0		
j. Total Receivables	\$165,678	\$231,74	
3. Investments, at Fair Value	\$4,521,113	\$3,439,06	
4. Liabilities			
a. Benefits and refunds payable	\$0	9	
b. Accrued payroll taxes and deductions	0		
c. Securities purchased	(73,747)	(110,10	
d. Administrative and consulting fees payable	(916)	(5,37	
e. Currency contract payable	(102,655)	(168,42	
f. Securities lending collateral	(374,384)	(179,56	
g. Total Liabilities	(\$551,702)	(\$463,46	
5. Total Market Value of Assets Available for Benefits	\$4,330,426	\$3,405,10	

Reconciliation of Plan Net Assets

Assets at Market Value							
	Item	FYE 2012	FYE 2011				
A.	Market Value of Assets at Beginning of Year						
л.	1. Beginning of year	\$3,405,103	\$3,358,325				
	2. Adjustment*	ψ3,403,103	(34,368)				
	3. Adjusted beginning of year	\$3,405,103	\$3,323,957				
В.	Contribution Income:						
	1. Contributions						
	a. Employee	\$256,054	\$241,333				
	b. Employer	109,253	103,329				
	c. Other	121,542	44				
	d. Total	\$486,849	\$344,706				
	2. Investment Income						
	a. Interest, dividends, and other income	\$104,770	\$50,458				
	b. Net appreciation	394,389	(263,355)				
	c. Investment expenses	(16,917)	(11,370)				
	d. Net investment income	\$482,242	(\$224,267)				
	3. Securities Lending						
	a. Gross income	\$3,065	\$1,037				
	b. Deductions	(460)	(162)				
	c. Net investment income	\$2,605	\$875				
	4. Benefits and Refunds						
	a. Refunds	-	-				
	b. Regular monthly benefits	(\$43,474)	(\$36,785)				
	c. Total	(\$43,474)	(\$36,785)				
	5. Administrative and miscellaneous expenses	(\$2,899)	(\$3,383)				
C.	Market Value of Assets at End of Year	\$4,330,426	\$3,405,103				

^{*} The Adjustment reflects the difference between the approximate amount transferred from the State Plan to the Air Guard Plan in the FYE 2010 valuation and the actual amount transferred.

Progress of Fund Through December 31, 2012

Plan Year														
Ending	Er	nployer	\mathbf{E}	mployee	Admi	inistrative	Net :	Investment		Benefit			Actı	ıarial Value
December 31	Cont	ributions*	Con	tributions	E	penses	In	come**	P	ayments	Trai	nsfers	(of Assets
Total	\$	398,227	\$	558,103	\$	(8,484)	\$	736,166	\$	(272,426)	\$	-		
2010	\$	64,059	\$	60,716	\$	(2,202)	\$	270,234	\$	(192,167)	\$	-	\$	3,238,626
2011		103,373		241,333		(3,383)		207,538		(36,785)		-		3,750,702
2012		230,795		256,054		(2,899)		258,394		(43,474)		-		4,449,572

^{*} Includes other funding sources

^{**} Net of investment expenses

Development of Actuarial Value of Assets

Item	FYE 2012	FYE 2011
1. Actuarial value of assets, beginning of year (without corridor)	\$3,750,702	\$3,238,626
2. Market value, end of year	\$4,330,426	\$3,405,103
3. Market value, beginning of year (adjusted)*	\$3,405,103	\$3,323,957
4. Non-investment/administrative net cash flow:		
a. Employee contributions	\$256,054	\$241,333
b. Employer contributions	109,253	103,329
c. Other contributions	121,542	44
d. Refund of employee accounts	-	-
e. Retirement benefits	(43,474)	(36,785)
f. Administrative expenses	(2,899)	(3,383)
g. Total net cash flow: [sum of (4a) through (4f)]	\$440,476	\$304,538
5. Investments and securities lending:		
a. Interest and dividends on investments	\$104,770	\$50,458
b. Gross income from securities lending	3,065	1,037
c. Fees and expenses	(17,377)	(11,532)
d. Total net income: [sum of (5a) through (5c)]	90,458	\$39,963
6. Investment income:		
a. Actual market return: (2) - (3) - (4g) - (5d)	\$394,389	(\$263,355)
b. Assumed rate of return	8.00%	8.00%
c. Assumed amount of return	199,230	237,901
d. Amount subject to phase-in: (6a) - (6c)	\$195,159	(\$501,256)
7. Phase-in recognition of investment income:		
a. Current year: 0.20 * (6d)	\$39,032	(\$100,251)
b. First prior year	(100,251)	29,925
c. Second prior year	29,925	-
d. Third prior year	-	-
e. Fourth prior year	-	-
f. Total phase-ins	(\$31,294)	(\$70,326)
8. Actuarial value of assets, end of year		
a. Preliminary actuarial value of assets, end of year:		
(1) + (4g) + (5d) + (6c) + (7f)	\$4,449,572	\$3,750,702
b. Upper corridor limit: 120% * (2)	5,196,511	4,086,124
c. Lower corridor limit: 80% * (2)	3,464,341	2,724,083
d. Actuarial value of assets, end of year	\$4,449,572	\$3,750,702
9. Difference between market and actuarial value of assets	(\$119,146)	(\$345,598)
10. Actuarial rate of return	6.51%	6.12%
11. Market rate of return**	14.06%	-0.90%
12. Ratio of actuarial value to market value of assets	102.75%	110.15%

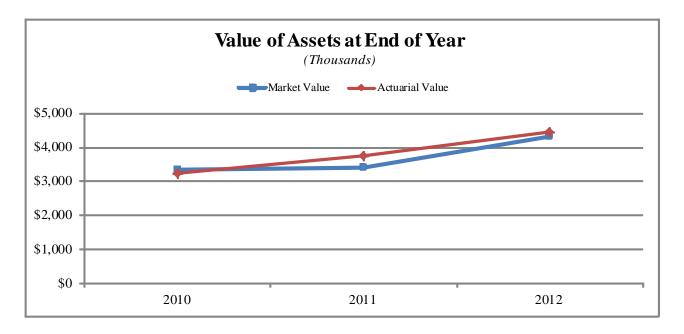
^{*} The Beginning of Year Market Value for FYE 2011 reflects the Adjustment to the amount transferred from the State Plan.

^{**} Current year Market rate of return is based on unaudited data and is supplied by NEPC, LLC.

History of Investment Returns

Plan Year	<u>Market</u>	<u>Actuarial</u>
(1)	(2)	(3)
2010	13.79%	9.00%
2011	-0.90%	6.12%
2012	14.06%	6.51%

The market rates above were provided by NEPC, LLC, including changes to the rates for 2010-2011 since the prior valuation. The actuarial rates above are based on the financial information provided by McGee, Hearne & Paiz, LLP.



Solvency Test

Valuation Date	Total Active Member Contributions	Inactive and Pensioner Liability	Employer Financed Active Accrued Liability	Actuarial Value of		ntage of Lia ered by As	
January 1	(1)	(2)	(3)	Assets	(1)	(2)	(3)
2011	\$2,315,540	\$651,812	\$1,224,849	\$3,238,626	100%	100%	22.1%
2012	2,691,205	570,660	1,118,985	3,750,702	100%	100%	43.7%
2013	3,102,424	553,829	1,195,992	4,449,572	100%	100%	66.3%

Schedule of Funding Progress

(1)	(2)	(2) (3)		(5)	(6)	(7)
						UAAL as a
		Actuarial	Unfunde d			Percentage
Valuation	Actuarial	Accrued	\mathbf{AAL}	Funde d		of Covered
Date	Value of	Liability	(UAAL)	Ratio	Covered	Payroll
January 1	Assets	(AAL)	[(3) - (2)]	[(2)/(3)]	Payroll	[(4)/(6)]
2011	\$3,238,626	\$4,192,201	\$953,575	77.25%	\$1,499,381	63.60%
2012	3,750,702	4,380,850	630,148	85.62%	1,522,749	41.38%
2013	4,449,572	4,852,245	402,673	91.70%	1,866,393	21.57%

Schedule of Contributions from the Employer(s) and Other Contributing Entities

(1)	(2) (3)		(4)	(5)	(6)
Fiscal Year Ending	Required C	GASB No. 25 Annual Required Contribution (ARC)		ontributions*	Percentage of GASB ARC Contributed
December 31	% of Payroll	Amount	% of Payroll	Amount	[(5)/(3)]
2011	0.81%	\$12,109	6.89%	\$103,373	853.69%
2012	(0.48%)	(7,270)	15.16%	230,795	(3,174.45%)
2013	(1.28%)	(23,938)	-	-	-

^{*} Includes other funding sources.

Reconciliation of Participant Data

	Active Participants	Vested Former Participants	Retired Participants	Disableds	Beneficiaries	Participants Due Refunds	Total
Number as of January 1, 2012	24	1	2	-	-	-	27
New participants	7	-	-	-	-	-	7
Vested terminations	-	-	-	-	-	-	-
Retirements	-	-	-	-	-	-	_
Disability	-	-	-	-	-	-	_
Deceased with beneficiary	_	-	-	-	-	-	-
Deceased without beneficiary	_	-	-	-	-	-	-
Due refunds	_	-	-	-	-	-	-
Lump sum payoffs	_	-	-	-	-	-	-
Rehires/return to active	_	-	-	-	-	-	_
Certain period expired	_	-	-	-	-	-	_
Reclassifications	_	-	-	-	-	-	-
Data corrections	_	-	-	-	-	-	-
Number as of January 1, 2013	31	1	2	-	-	-	34

Demographic Statistics

_	Januar		
	2013	2012	Change
Active Participants			
Number	31	24	29.2%
Vested	23	23	
Not vested	8	1	
Average age (years)	41.90	44.33	-5.5%
Average service (years)	11.50	13.63	-15.6%
Average entry age (years)	30.40	30.70	-1.0%
Total payroll*	\$1,866,393	\$1,522,749	22.6%
Average payroll*	\$60,206	\$63,448	-5.1%
Total employee contributions with interest	\$3,102,424	\$2,691,205	15.3%
Average employee contributions with interest	\$100,078	\$112,134	-10.8%
Vested former participants			
Number	1	1	0.0%
Average age (years)	45.51	44.51	2.2%
Total employee contributions with interest	\$88,377	\$83,770	5.5%
Average employee contributions with interest	\$88,377	\$83,770	5.5%
Service Retirees			
Number	2	2	0.0%
Average age (years)	65.00	64.00	1.6%
Total annual benefits	\$40,129	\$40,129	0.0%
Average annual benefit	\$20,065	\$20,065	0.0%
Disability Retirees			
Number	0	0	0.0%
Average age (years)	0.00	0.00	
Total annual benefits	\$0	\$0	
Average annual benefit	N/A	N/A	
Beneficiaries			
Number	0	0	0.0%
Average age (years)	0.00	0.00	2.2,0
Total annual benefits	\$0	\$0	
Average annual benefit	N/A	N/A	
Participants due refunds	0	0	0.0%

^{*} Projected payroll for the upcoming valuation year

Distribution of Male Active Members by Age and by Years of Service

Average Age = 42.3 Average Service = 11.4

Ag	ge	Whole Years of Service at Valuation Date							
Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 20	Count	-	-	-	-	-	-	-	-
	Avg. Salary	-	-	_	-	-	-	-	-
20-24	Count	1	-	-	-	-	-	-	
	Avg. Salary	*	-	-	-	-	-	-	
25-29	Count	3	-	-	-	-	-	-	
	Avg. Salary	*	-	-	-	-	-	-	
30-34	Count	2	3	-	-	-	-	-	
	Avg. Salary	*	*	-	-	-	-	-	\$47,3
35-39	Count	-	-	3	-	-	-	-	
	Avg. Salary	-	-	*	-	-	-	-	
40-44	Count	1	-	1	3	-	-	-	
	Avg. Salary	*	-	*	*	_	-	-	61,2
45-49	Count	-	-	-	-	2	-	-	
	Avg. Salary	_	-	_	_	*	-	-	
50-54	Count	-	-	3	-	3	-	-	
	Avg. Salary	-	-	*	-	*	-	-	60,4
55-59	Count	-	-	1	-	1	-	-	
	Avg. Salary	_	-	*	_	*	-	-	
60-64	Count	-	-	-	1	-	-	-	
	Avg. Salary	_	-	_	*	_	-	-	
65-69	Count	-	-	-	-	-	-	-	-
	Avg. Salary	-	-	-	-	_	-	-	-
70 & Over	Count	-	-	-	-	-	-	-	-
	Avg. Salary	-	-	-	-	_	-	-	-
Totals	Count	7	3	8	4	6	-	-	
	Avg. Salary	\$46,068	*	\$54,709	\$66,701	\$71,468	_	_	\$57,20

Average Salary represents annualized salary earned in 2012 and is not shown for cells with counts less than or equal to three participants

Distribution of Female Active Members by Age and by Years of Service

Average Age = 37.9 Average Service = 12.2

Ag	ge	Whole Years of Service at Valuation Date								
Last Bi	rthday	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals	
Less than 20	Count	-	-	-	-	-	-	-	-	
	Avg. Salary	-	-	-	-	-	-	-	-	
20-24	Count	-	-	-	-	-	-	-	-	
	Avg. Salary	-	-	-	-	-	-	-	-	
25-29	Count	1	-	-	-	-	-	-	1	
	Avg. Salary	*	-	-	-	-	-	-	*	
30-34	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
35-39	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
40-44	Count	-	-	-	1	1	-	-	2	
	Avg. Salary		-		*	*	-	-	*	
45-49	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
50-54	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
55-59	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
60-64	Count	-	-	-	-	-	-	-	-	
	Avg. Salary	-	-	-	-	-	-	-	-	
65-69	Count	-	-	-	-	-	-	-	-	
	Avg. Salary		-				-	-		
70 & Over	Count	-	-	-	-	-	-	-	-	
	Avg. Salary	-	-	-	<u> </u>	-		-	-	
Totals	Count	1	_	-	1	1	-	-	3	
	Avg. Salary	*	-	-	*	*	-	-	*	

Average Salary represents annualized salary earned in 2012 and is not shown for cells with counts less than or equal to three participants

Distribution of Total Active Members by Age and by Years of Service

Average Age = 41.9 Average Service = 11.5

Ag	je	Whole Years of Service at Valuation Date							
Last Bi	rthday	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 20	Count	-	-	-	-	-	_	-	-
	Avg. Salary	-	-	-	-	-	-	-	-
20-24	Count	1	-	-	-	-	-	-	1
	Avg. Salary	*	-	-	-	-	-	-	*
25-29	Count	4	-	-	-	-	-	-	4
	Avg. Salary	\$45,471	-	-	-	-	-	-	\$45,471
30-34	Count	2	3	-	-	-	-	-	5
	Avg. Salary	*	*	-	-	-	-	-	47,329
35-39	Count	-	-	3	-	-	-	-	3
	Avg. Salary	-	-	*	-	-	-	-	*
40-44	Count	1	-	1	4	1	-	-	7
	Avg. Salary	*	-	*	\$63,981	*	-	-	61,454
45-49	Count	-	-	-	-	2	-	-	2
	Avg. Salary	-	-	-	-	*	-	-	*
50-54	Count	-	-	3	-	3	-	-	6
	Avg. Salary	-	-	*	-	*	-	-	60,445
55-59	Count	-	-	1	-	1	-	-	2
	Avg. Salary	-	-	*	-	*	-	-	*
60-64	Count	-	-	-	1	-	-	-	1
	Avg. Salary	-	-	-	*	-	-	-	*
65-69	Count	-	-	-	-	-	-	-	-
	Avg. Salary	-	-	-	-	-	-	-	_
70 & Over	Count	_	-	_		-	_	-	-
	Avg. Salary		-				-	-	<u>-</u>
Totals	Count	8	3	8	5	7	-	-	31
	Avg. Salary	\$45,928	*	\$54,709	\$65,532	\$70,252	-	-	\$57,111

Average Salary represents annualized salary earned in 2012 and is not shown for cells with counts less than or equal to three participants

Schedule of Pension Recipients Added to and Removed from Rolls

Fiscal Year	Added	to Rolls*	Remove	d from Rolls	T	otal	Percent Increase in				
Ending December		Annual Pension		Annual Pension		Annual Pension	Annual Pension	Annual Pension			
31	Count	Benefits	Count	Benefits	Count	Benefits	Benefits	Benefit			
2011	0	\$0	0	\$0	2	\$40,129	0.00%	\$20,065			
2012	0	0	0	0	2	40,129	0.00%	20,065			
2013	0	0	0	0	2	40,129	0.00%	20,065			

^{*} Includes cost-of-living increases

Pensioners by Age

Average Age Male = 65.0 Average Age Female = N/A Average Age Total = 65.0

Age Last Birthday	Males	Females	Total
Under 50	0	0	0
50-54	0	0	0
55-59	0	0	0
60-64	1	0	1
65-69	1	0	1
70-74	0	0	0
75-79	0	0	0
80-84	0	0	0
85 & over	0	0	0
Total	2	0	2

Pensioners by Option Code

		Count		Monthly Benefit			
Option Code **	Male	Female	Total	Male	Female	Total	
1	2	-	2	*	-	*	
2	-	-	-	-	-	-	
2P	-	-	-	-	-	-	
3	-	-	-	-	-	-	
3P	-	-	-	-	-	-	
4	-	-	-	-	-	-	
5	-	-	-	-	-	-	
Total	2	-	2	*	-	*	
Beneficiaries	-	-	-	-	-	-	
Grand Total	2	-	2	*	-	*	

^{*} Average benefit is not shown for cells with count less than or equal to three participants

^{**} See Optional Forms of Payment in Appendix B

Retirees and Disabled Members by Service at Retirement and Years Since Retirement

(Average Monthly Benefit)

Average Service at Retirement = 19.8

Average Years Since Retirement = 8.0

Service at		Years Elapsed Since Retirement							
Retirement		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 5	Count	-	-	-	-	-	-	-	1
	Avg. Benefit	-	-	-	-	-	-	-	-
5-9	Count	-	-	-	-	-	-	-	-
	Avg. Benefit	-	-	-	-	-	-	-	-
10-14	Count	-	-	-	-	-	-	-	-
	Avg. Benefit	-	-	-	-	-	-	-	-
15-19	Count	-	1	-	-	-	-	-	1
	Avg. Benefit	-	*	-	-	-	-	-	*
20-24	Count	-	-	1	-	-	-	-	1
	Avg. Benefit	-	-	*	-	-	-	-	*
25-29	Count	-	-	-	-	-	-	-	-
	Avg. Benefit	-	-	-	-	-	-	-	-
30-34	Count	-	-	-	-	-	-	-	-
	Avg. Benefit	-	-	-	-	-	-	-	-
35 & Over	Count	-	-	-	-	-	-	-	-
	Avg. Benefit	-	-	-	-	-	-	-	-
Totals	Count	-	1	1	-	-	-	-	2
	Avg. Benefit	-	*	*		-		-	*

Average benefit is not shown for cells with count less than or equal to three participants

Retirees and Disableds by Year of Retirement

January 1, 2013 Total = 2

Year of Retirement	Count
Under 1998	0
1998	0
1999	0
2000	0
2001	0
2002	1
2003	0
2004	0
2005	0
2006	0
2007	1
2008	0
2009	0
2010	0
2011	0
2012 & Over	0



SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Assumptions and Methods

The following methods and assumptions were used in preparing the January 1, 2013 actuarial valuation report.

1. Valuation Date

The valuation date for any given year is January 1st, the first day of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

2. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal (EAN) actuarial cost method, amortized as a level percentage of payroll. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) the rate that will amortize the unfunded actuarial accrued liability (UAAL).

- a. The valuation is prepared on the projected benefit basis, under which the present value, at the investment return rate assumed to be earned in the future (currently 8.00%), of each participant's expected benefit payable at retirement or death is determined, based on his/her age, service, sex and compensation. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability, or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable for the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Fund on account of the present group of participants and beneficiaries.
- b. The employer contributions required to support the benefits of the Fund are determined using a level funding approach, and consist of a normal cost contribution and an accrued liability contribution.
- c. The normal cost contribution is determined using the "entry age normal" actuarial cost method. Under this method, a calculation is made to determine the average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new participant during the entire period of his/her anticipated covered service, would be required to meet the cost of all benefits payable on his/her behalf based on the benefits provisions applicable for the individual member.

d. The unfunded actuarial accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability and amortizing the result over 30 years from the valuation date.

3. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income, with interest, dividends, and other income recognized immediately. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

4. Economic Assumptions

a. Investment return

8.00% per year, compounded annually, composed of an assumed 3.50% inflation rate and a 4.50% net real rate of return. This rate represents the assumed return, net of investment expenses.

b. Salary increase rate

Age	Rate
20	9.50%
25	8.30%
30	6.90%
35	6.05%
40	5.60%
45	5.35%
50	5.00%
55	5.00%
60	5.00%

c. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 4.50% per year. This increase rate is solely due to the effect of inflation on salaries, with no allowance for future membership growth.

5. <u>Demographic Assumptions</u>

a. Rates Before Retirement

Healthy Mortality: 1994 Group Annuity Mortality with margins projected (scale AA) to 2008

Disabled Mortality: 1979 PBGC Disabled Lives Receiving Social Security

	De	ath		Witho	drawal
				Ulti	mate
Age	Male	Female	Disability	Male	Female
20	0.04%	0.02%	0.01%	10.00%	11.00%
25	0.06%	0.02%	0.01%	10.00%	11.00%
30	0.07%	0.03%	0.01%	10.00%	11.00%
35	0.08%	0.04%	0.01%	4.83%	5.83%
40	0.10%	0.06%	0.01%	4.44%	5.44%
45	0.13%	0.08%	0.03%	4.22%	5.22%
50	0.20%	0.11%	0.08%	4.10%	5.10%
55	0.34%	0.21%	0.20%	4.03%	5.03%
60	0.64%	0.41%	0.20%	4.00%	5.00%

Withdrawal							
	First fiv	First five years					
Service	Male	Female					
1	25%	28%					
2	18%	22%					
3	12%	15%					
4	10%	13%					
5	10%	12%					

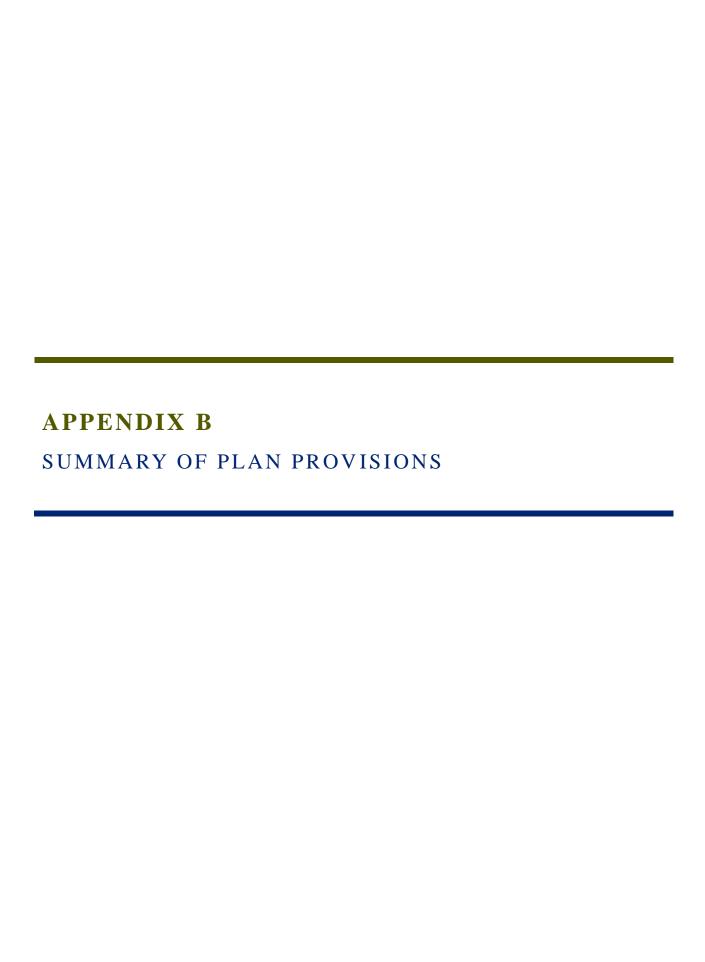
b. Retirement Rates

	Service										
Age	<=25	26	27	28	29	30	31	32	33	34	>=35
<=50	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	10%
51	3%	3%	3%	3%	3%	3%	3%	3%	3%	10%	10%
52	3%	3%	3%	3%	3%	3%	3%	3%	10%	10%	10%
53	3%	3%	3%	3%	3%	3%	3%	10%	10%	10%	10%
54	4%	4%	4%	4%	4%	4%	10%	10%	10%	10%	10%
55	6%	6%	6%	6%	6%	10%	10%	10%	10%	10%	10%
56	6%	6%	6%	6%	10%	10%	10%	10%	10%	10%	10%
57	7%	7%	7%	10%	10%	10%	10%	10%	10%	10%	10%
58	7%	7%	10%	10%	10%	10%	10%	10%	10%	10%	10%
59	10%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
60	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
61	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
62	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
63	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
64	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
65	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
66	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
67	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
68	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
69	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



6. Other Assumptions

- a. Percent married: 85.00% of employees are assumed to be married. (No beneficiaries other than the spouse assumed.)
- b. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
- c. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.
- d. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit. It is assumed that 25% of active members who terminate with a deferred vested benefit will elect to have their contributions refunded.
- e. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available, which for this plan is age 60.
- f. No benefit data is available for members entitled to deferred benefits. The present value of benefits expected to be paid to vested inactive non-retired members is approximated using the data provided.
- g. There will be no recoveries once disabled.
- h. Administrative expenses: Assumed to be the average of the actual expenses for the prior two years, with each year projected at 6.50% to the valuation date.
- i. Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported pay represents amount paid to members during the year ended on the valuation date.
- j. Decrement timing: Decrements of all types are assumed to occur mid-year.
- k. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- 1. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in the report, and the actual payroll payable at the time contributions are made.
- m. Benefit Service: All members are assumed to accrue one year of service each year. Exact fractional service is used to determine the amount of benefit payable.



Summary of Plan Provisions

Covered Members Any employees covered by the Air Guard Firefighter Pension Plan (Air

Guard Firefighters employees).

Final Average Salary Employee's average annual salary for the highest paid three continuous

years of service.

Service Retirement

Eligibility Age 60 with four or more years of service or age 50 with 25 or more years

of service. All employees are eligible for a reduced benefit at age 50 with four or more years of service or any age with 25 or more years of service.

Monthly Benefit 2.50% of employee's Final Average Salary for each year of credited service.

This amount is reduced by 5.0% per year that the employee is under age 60. However, members who are at least age 55 retiring with a combined age

and service of at least 75 receive an unreduced benefit.

Vesting Any employee who has left employment with four or more years of service,

and who has not withdrawn accumulated contributions, is eligible to receive the above benefit or can elect to receive a lump-sum refund of contributions with interest. An employee who terminates with less than four years of

service is only eligible for the lump-sum benefit.

Disability Benefit

Eligibility Ten or more years of service.

Benefit 65% of salary as of the date of disability, payable immediately.

Pre-retirement Death Benefit

Eligibility No age or service requirements.

Benefit A lump sum equal to two times the employee contributions with interest.

If the employee is vested, the beneficiary can elect, in lieu of this lump sum, to receive a monthly annuity equal to the actuarial equivalent of the

retirement benefit that would be due the employee.

Contributions

Employee 16.65% of salary.
Employer 7.12% of salary.
Interest 5.50% annually.

Cost-of-Living Improvements A one-time ad-hoc cost-of-living improvement may be granted only if the

funded ratio is shown to stay at least 100%.

Optional Forms of Payment

Option 1 (normal form) Monthly benefit for life with a lump-sum death benefit equal to the

excess (if any) of the employee contributions with interest over the total

benefits received.

Option 2 Monthly benefit for life. Upon death, 100% of the benefit continues to be

paid to the beneficiary.

Option 2P Monthly benefit for life. Upon death, 100% of the benefit continues to be

paid to the beneficiary. Benefit reverts to Option 1 amount but without

the cash refund feature upon beneficiary death.

Option 3 Monthly benefit for life. Upon death, 50% of the benefit continues to be

paid to the beneficiary.

Option 3P Monthly benefit for life. Upon death, 50% of the benefit continues to be

paid to the beneficiary. Benefit reverts to Option 1 amount but without

the cash refund feature upon beneficiary death.

Option 4 Monthly benefit for life with a guarantee of 120 monthly payments

Option 5 The largest possible monthly benefit payable for life with no lump-sum

death benefit.